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23. (New) A kit for zone electrophoresis comprising gels containing gel buffer, said gel buffer comprising benzoic acid and/or a salt of benzoic acid.
24. (New) A method for performing gel electrophoresis in immunofixation, comprising:
- a) preparing samples for electrophoresis;
 - b) applying the samples to a gel containing gel buffer comprising benzoic acid and/or a salt of benzoic acid;
 - c) filling both compartments of an electrophoresis apparatus with compartment buffer which comprises benzoic acid and/or a salt of benzoic acid;
 - d) placing the gel in the electrophoresis apparatus;
 - e) connecting a power supply to the apparatus; and
 - f) applying a voltage to the gel until electrophoresis is complete.
25. (New) The method of claim 24 wherein the samples are serum or urine.
26. (New) The method of claim 24 further comprising the step of performing immunofixation on the gel.
27. (New) The method of claim 24 further comprising the steps of:
- g) blotting the surface of the gel;
 - h) applying fixation reagents and antibodies to the gel;
 - i) incubating the gel with the fixation reagents and antibodies;
 - j) blotting the gel;
 - k) drying the gel;
 - l) staining the gel;
 - m) destaining the gel; and
 - n) drying the gel.

28. (New) The method of claim 25 wherein the gel buffer and/or the compartment buffer comprises a salt of benzoic acid.
29. (New) The method of claim 27 wherein the gel buffer and/or the compartment buffer comprises a salt of benzoic acid.
30. (New) The method of claim 29 wherein the salt of benzoic acid is a sodium salt, a potassium salt, a calcium salt, a magnesium salt, or an ammonium salt.
31. (New) The method of claim 26 wherein the gel buffer and/or the compartment buffer comprise benzoic acid and/or a salt of benzoic acid at a concentration of 1 to 10 grams/liter.
32. (New) The method of claim 26 wherein the gel buffer comprises benzoic acid and/or a salt of benzoic acid at a concentration selected from the group consisting of: 3 to 8 g/L, 3.5 to 8 g/L, 4 to 8 g/L, 4.5 to 8 g/L, 5 to 8 g/L, 5.5 to 8 g/L, 6 to 8 g/L, 6.5 to 8 g/L, 7 to 8 g/L, or 7.5 to 8 g/L.
33. (New) The method of claim 31 wherein the gel buffer comprises benzoic acid and/or a salt of benzoic acid at a concentration of 6.5 to 7.5 grams/liter.
34. (New) The method of claim 26 wherein the compartment buffer comprises benzoic acid and/or a salt of benzoic acid at a concentration selected from the group consisting of: 1 to 5 g/L, 1.5 to 5 g/L, 2 to 5 g/L, 2.5 to 5 g/L, 3 to 5 g/L, 3.5 to 5 g/L, 4 to 5 g/L, 4.5 to 5 g/L.
35. (New) The method of claim 31 wherein the compartment buffer comprises benzoic acid and/or a salt of benzoic acid at a concentration of 3 to 4 grams/liter.

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